

# **BPA Riparian Fencing and Alternative Water Development Projects Completed within Asotin Creek Watershed**

**Final Report  
2000 - 2001**



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Bonneville Power Administration  
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Portland, Oregon 97208

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# BPA Riparian Fencing and Alternative Water Development Projects Completed within Asotin Creek Watershed

## 2000 and 2001 Asotin Creek Fencing Final Report of Accomplishments

BPA Project Numbers;  
2000-54-00 Asotin Creek Riparian Fencing



### Cooperators:

Bonneville Power Administration  
Natural Resource Conservation Service  
Washington Department of Fish and Wildlife  
Umatilla National Forest Service, Pomeroy Ranger District  
Interagency Committee for Outdoor Recreation  
Washington State Conservation Commission  
Salmon Recovery Funding Board  
Nez Perce Salmon Corps.

# BPA Riparian Fencing and Alternative Water Development Projects Completed within Asotin Creek Watershed

## 2000 - 2002 Asotin Creek Fencing Final Report of Accomplishments

BPA Project Numbers;

2000-54-0      Asotin Creek Riparian Fencing

Prepared for:

Bonneville Power Administration  
Natural Resource Conservation Service  
Washington Department of Fish and Wildlife  
Umatilla National Forest Service, Pomeroy Ranger District  
Interagency Committee for Outdoor Recreation  
Washington State Conservation Commission  
Salmon Recovery Funding Board  
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by:

Bradley J. Johnson  
Dist. Manager / Model Watershed Coord. / Lead Entity  
Asotin County Conservation District  
720 Sixth St., Ste B  
Clarkston, WA 99403  
[brad-johnson@wa.nacdnet.org](mailto:brad-johnson@wa.nacdnet.org)

## *Abstract*

The Asotin County Conservation District (ACCD) is the primary entity coordinating habitat projects on both private and public lands within the Asotin Creek watershed. The watershed covers approximately 325 square miles in the Blue Mountains of southeastern Washington in Water Resource Inventory Area (WRIA) 35. According to Washington Department of Fish and Wildlife's (WDFW) Priority WRIA's by "At-Risk Stock Significance Map", it is the highest priority WRIA in southeastern Washington. Summer steelhead, bull trout, and Snake River spring chinook salmon which are listed under the Endangered Species Act (ESA), are present in the watershed. WDFW manages it as a Wild Steelhead Reserve; no hatchery fish have been released here since 1997.

The ACCD has been working with landowners, Bonneville Power Administration (BPA), Washington State Conservation Commission (WCC), Natural Resource Conservation Service (NRCS), Washington Department of Fish and Wildlife (WDFW), U.S. Forest Service, Pomeroy Ranger District (USFS), Nez Perce Tribe, Washington Department of Ecology (DOE), National Marine Fisheries Service (NMFS), and U.S. Fish and Wildlife Service (USFWS) to address habitat projects in Asotin County. Local students, volunteers and Salmon Corps members from the Nez Perce Tribe have been instrumental in the success of the Model Watershed Program on Asotin Creek.

ACCD began coordinating habitat projects in 1995 with the help of BPA funding. Approximately two hundred and seventy-six projects have been implemented as of 1999. The Washington State Legislature was successful in securing funding for endangered salmon and steelhead recovery throughout the State in 1998. While these issues were new to most of the State, the ACCD has been securing and administering funding for endangered salmonids since 1994.

The *Asotin Creek Riparian Planting 2000-053-00 and Asotin Creek Riparian Fencing 2000-054-00* teamed BPA and the Governor's Salmon Recovery Funding to plant approximately 84,191 trees and shrubs in the Asotin Creek Watershed. In addition BPA and private cost-share dollars were utilized to drill 3 wells, provide 15 off-site alternative water developments (troughs), 5 spring developments, and 9,100 feet of riparian fencing. The trees will provide shade and long-term LWD recruitment to the stream. The wells, alternative water developments, springs and fencing will reduce direct animal impacts on the stream. In one area alone, a well, 3,000 ft of riparian fence with 5 alternative water developments will exclude 300 head of cattle from using the stream as a source of drinking water during the winter months.

## *Acknowledgements*

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Special thanks to the Asotin County Commissioners and participating landowners for their input and cooperation.

Additionally to the Washington State Conservation Corps (DOE) who donated labor for a fencing project at Headgate Park and removal of existing fences inside Conservation Reserve Enhancement Buffers.

These projects were a cooperative effort between many different agencies and private landowners. Without the commitment and dedication of all these individuals, our projects would not be as successful. We appreciate everyone's hard work and look forward to continuing working together on habitat projects in Asotin County.

## *Asotin Creek Watershed History*

Asotin Creek, a tributary to the Snake River at (Rm) 145 drains approximately 325 square miles of Asotin and Garfield Counties. Headwaters originate in the Blue Mountains (6,200 ft) and flow east into the Snake River (800 ft) at Asotin, WA. Located in WRIA # 35, the highest priority WRIA in southeastern Washington according to WDFW's "At-Risk Stock Significance Map," Asotin Creek is part of the Governor's Snake River Salmon Recovery Region.

Asotin Creek remains an important Snake River tributary for anadromous salmonid production in Washington and has been given the distinction of a reserve for Wild Steelhead under current WDFW management policy. Charley Creek, an upper tributary, historically has some of the highest densities of juvenile steelhead in southeastern Washington according to WDFW fisheries surveys.

ESA listed stocks of summer steelhead, bull trout and spring chinook along with resident rainbow trout utilize the watershed. Indigenous anadromous fish species most actively targeted for management are summer steelhead, bull trout, and spring chinook salmon. The goals for these species are to restore sustainable, naturally producing populations to support tribal and non-tribal harvest and cultural and economical practices while protecting the biological integrity and genetic diversity of these species in the watershed. The broad general strategies used to achieve the habitat objectives include protecting and restoring prioritized habitat through the use of in-stream, riparian and upland best management practices.

The *Asotin Creek Model Watershed Plan (Plan)* was printed in 1995. It was the first BPA funded Model Watershed Plan completed in Washington that deals specifically with watershed restoration and protection focused on fish habitat restoration. Anadromous salmonid production in Asotin Creek is impacted by high summer stream temperatures, sediment deposition, turbidity, loss of riparian vegetation and lack of suitable resting and rearing pool habitat as recognized by the *Plan*. Decreasing stream water temperatures and protecting fragile streambanks are goals identified in the *Plan*. The [Asotin Creek Riparian Planting and Fencing Projects](#) were identified and proposed for funding by ACCD as a means to achieve these goals.

Successful completion of past BPA, SRFB and WCC habitat projects and working relationships with watershed residents and interested parties have resulted in projects being completed to address factors limiting salmonids. Fencing and alternative water developments have been completed to reduce direct animal impacts to the stream and riparian planting projects have been identified as a high priority.



On March 16, 1999 the National Marine Fisheries Service (NMFS) listed seven additional salmon species as Threatened under the federal Endangered Species Act, bringing the total statewide listings to sixteen. Spring chinook were listed in 1992, steelhead in 1997 and bull trout in 1998, all of which occur in Asotin Creek. The new listings in March did not affect ACCD projects as much as other areas of the state. The ACCD has been working with the NMFS and USFWS to obtain permits for its BPA In-Stream Habitat Projects. Biological Assessments were submitted for and approved through this process and the ACCD has developed a good working relationship with the landowners, federal and state agencies, and tribes.

NMFS believes that any successful recovery strategy must demonstrate:

- Substantive protective and conservation elements.
- A high degree of certainty that it will be implemented.
- A comprehensive monitoring program.
- A recognition of the need for partnerships between federal, state, local and tribal governments.

The ACCD supports this approach, however local citizens and landowners need to be recognized as partners by all government agencies. Without cooperation and partnerships at the local level this process will not be successful.

In April of 2002 the NMFS released their **Interim Abundance and Productivity Targets for Pacific Salmon and Steelhead Listed under the Endangered Species Act in the Interior Columbia Basin. Interim Objectives – Snake River Steelhead ESU for Asotin Creek Interim Abundance Targets of 400**. This provides a preliminary and general sense of ESA recovery objectives currently under development. These interim targets are only a starting point. NMFS will replace these targets with scientifically more rigorous and comprehensive recovery goals using viability criteria developed through the Interior Columbia Technical Recovery Team (TRT) process that commenced in October, 2001 (according to a letter from Bob Lohn of NMFS to Larry Cassidy of the NWPPC).

The projects in this report have been completed to help reduce direct impacts to salmonid bearing streams in the Asotin Creek watershed. Riparian planting, fencing, and alternative water developments on private property inform and educate local individuals on the importance of healthy riparian areas and how it impacts anadromous salmonid production.



*BPA Riparian Fencing  
and Alternative Water Development Projects Completed*

<b>Riparian Project</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>TOTALS</b>
Riparian Fence	---	1,010 ft	6,353 ft	<b>7,363 ft</b>
Water Troughs	---	4	13	<b>17</b>
Wells	1	---	2	<b>3</b>
Spring Developments	---	1	4	<b>5</b>
Riparian Electric Fence	1,900 ft	---	---	<b>1,900 ft</b>
Asotin Creek CREP	---	---	102.7 ac 2.6 stream miles 180 ft avg buffer	<b>102.7 ac 2.6 miles 180 ft buffer</b>
County CREP	---	---	295.5 ac 7.4 stream miles 162 ft avg buffer	<b>295.5 ac 7.4 miles 162 ft buffer</b>
<b>BPA FUNDS EXPENDED BY YEAR</b>	<b>\$5,477.60</b>	<b>\$10,997.82</b>	<b>\$46,340.70 *</b>	<b>\$62,816.12*</b>

\* Does not include the CREP Funds (not available, because some of the projects are not completed).

## *Charley Creek Riparian Fencing Project*



Electric Fence installed on Charley Creek after riparian willow plantings



Enclosed area after three growing seasons.

*FY 2001 Riparian Fencing Projects on Asotin Creek*



Frank Koch Meander aerial with fence running along road and irrigate field.



Frank Koch Meander with fence along road and upper left between large trees.



*F. Koch Alternative Water Development*



Well and pump shed on Asotin Creek



Well with pump shed and frost free water trough in the background

*FY 2001 Riparian Fencing Projects on Asotin Creek*



Heitstuman Riparian Fencing Project with a stream buffer and Dry Gulch fenced



Dry Gulch before exclusion fence



Dry Gulch after exclusion fence

*FY 2001 Riparian Fencing Projects on Asotin Creek*



Dry Gulch a tributary to Asotin Creek with exclusion fencing



Frost free water trough, fence excluding animal from Asotin Creek



*FY 2001 Riparian Fencing Projects on Asotin Creek*



CREP Fence on lower Asotin Creek, notice DOE Conservation Corp



Conservation Corps removing fence that landowner had installed



Wire is being rolled up and fence post removed, notice new buffer width



*FY 2001 Riparian Fencing Projects on Asotin Creek*



Aerial shot of lower Hendrickson's with side channel exclusion and riparian plantings



Frost free water trough outside riparian buffer, cattle are excluded from Asotin Creek